AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/612744 Filing Date: June 30, 2003

Title: Integrated Core Microelectronic Package

Assignee: Intel Corporation

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REMARKS

This responds to the Office Action mailed on April 19, 2004. Claims 9-29 are now pending in this application.

§102 Rejection of the Claims

Claims 9-11 and 16 were rejected under 35 USC § 102(e) as being anticipated by Link (U.S. 6,162,661). Applicant respectfully traverses this rejection and requests the Office to consider the following.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), M.P.E.P. §2131, 8th Ed., Rev. 1).

The Office Action erroneously states that Link includes a "microelectronic package core having at least one opening 100 defined therein". (Office Action at page 2). The structure that includes the item 100 is a "spacer element 92" that is not a package core. The error is compounded by the Office Action asserting "adhereing the microelectronic package core to at least one microelectronic die with an encapsulation material" (Ibid). Because all the claims limitations are not taught in a single reference, Link does not anticipate the claims. Withdrawal of the rejections is respectfully requested.

Applicant notes that claims 10-14 depend from rejected claim 9 and they are therefore likewise not anticipated by the cited reference. Withdrawal of the rejections is respectfully requested.

§103 Rejection of the Claims

Claims 12-15 and 17-29 were rejected under 35 USC § 103(a) as being unpatentable over Link in view of the remark. Applicant respectfully traverses the rejection and requests the Office to consider the following.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the

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knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (M.P.E.P. § 2143 8th Ed, Rev.1).

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Regarding claims 12 and 16, the Office Action admits that Link does not teach "the method further including forming at least one second dielectric material layer disposed over at least one first conductive trace and at least one first dielectric material layer." (Office Action at page 3). The Office Action does not cite to a reference that teaches or suggests this claim limitations. Since all the elements of claim 12 are not found in the cited reference, Applicant assumes that the Office is taking official notice of the missing element from an undisclosed source. Applicant respectfully objects to the taking of official notice, and pursuant to M.P.E.P. § 2144.03, Applicant traverses the assertion of official notice and requests that the Office cite a reference that teaches the missing element. If the Office cannot cite a reference that teaches the missing element, applicant respectfully requests that the Office provide an affidavit that describes how the missing element is present in the prior art. If the Office cannot cite a reference or provide an affidavit, Applicant requests withdrawal of the rejection and reconsideration and allowance of claims 12 and 16.

Regarding the independent claims 15, 21, and 25, the Office Action further admits that the cited reference does not teach a limitation (Office Action at pages 3 and 4). Because the Applicant assumes the Office is again taking official notice, Applicant traverses the assertion of official notice and requests that the Office cite a reference that teaches each missing element. If the Office cannot cite a reference that teaches the missing element, applicant respectfully requests that the Office provide an affidavit that describes how the missing element is present in the prior art. If the Office cannot cite a reference or provide an affidavit, Applicant requests withdrawal of the rejection and reconsideration and allowance of independent 15, 21, and 25.

Because the Office has admitted that the cited reference does not teach all the claim elements of the independent claims, Applicant respectfully asserts that all rejected claims that

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depend from claims 15, 21, or 25 are also not taught in the cited reference. Because the Applicant assumes the Office is again taking official notice, Applicant traverses the assertion of official notice and requests that the Office cite a reference that teaches the missing element. If the Office cannot cite a reference that teaches the missing element, applicant respectfully requests that the Office provide an affidavit that describes how the missing element is present in the prior art. If the Office cannot cite a reference or provide an affidavit, Applicant requests withdrawal of the rejection and reconsideration and allowance of the dependent claims.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, John Greaves at (801) 278-9171, or Applicant's below-named representative at (612) 349-9592 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

QUAT T. VU ET AL.

By their Representatives,

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(612) 349-9592

Date June 21, 2004

Ann M. McCrackin Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21st day of June 2004.

Name

Anne M. Richards

Signature